

Part II. The Demand for Electronic Services in Spain.

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Study carried out for *DGXIII* of the *European Commission* by the *Institut d'Estadística de Catalunya (Idescat)*, with the cooperation of the *Asociación Multisectorial de la Información (Asedie)*.

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1. Introduction

Between the 4th and the 16th of the past December 1998, the *Institute of Statistics of Catalonia (Idescat)* carried out a statistics operation to evaluate the use of the new information and communication technologies in the Spanish society. The study is a part of the report *MSSTUDY II*, subsidized 50% by the *DGXIII* of the *European Commission*, and that in Spain had the cooperation of *ASEDIE (Multisectoral Association of the Information)*.

With the collaboration of a company specialized in computer aided telephone interviews (CATI), 1.600 interviews were carried out in private households randomly chosen and in amounts proportional to the population of each Spanish province, taking into account different strata like town size, age and gender.

This number of interviews is considered technically enough as for obtaining reliable real data, with a precision level of 95% and a maximal error of 2,5%. To implement the 1.600 interviews it was necessary to carry out nearly 11.000 telephone calls in order to avoid automatic answer machines (currently a public free service of *Telefónica*), companies that appear in the telephone directory under personal names, to look for people in the chosen strata, to substitute persons that did not want to answer the questionnaire, etc.

At the expenses of the *Institut d'Estadística de Catalunya*, it was carried out another independent sampling of 1.600 persons of the Catalanian region only. This allowed to obtain 2 similar sets of tables, and the exercise proved to be very useful to check the homogeneity and the coherence of the results. We offer, then, these data with an additional degree of reliability because of having duplicated the security in the method.

[The results of this second operation were partly published in February 1999 by the *Comissionat per a la Societat de la Informació*, of the *Generalitat de Catalunya* (the Catalanian regional government) and showed some advancement of this autonomous community over the Spanish average (for ex., 50,0% of households have one or more computers; 45,7% of the inhabitants are computer users and 19% of the population –figures are referred always to the considered same age group-- use internet or other online services)].

It should be underlined that, following the methodology proposed by the *European Commission*, the interviews were addressed only to people aged between 15 and 65, because this is considered to be the segment of population more active (and, evidently, only if they had telephone installed

at home). According to the Spanish *Instituto Nacional de Estadística* the number of inhabitants in that segment is 27.264.000, approximately (population projected at July 1st 1998).

Although a first question referred simply to the availability or not of a computer in the household and it could have been answered by any member, all the questions were addressed to a specific person of each household, chosen randomly among those living in it (a draw was done in "real time" after having enquired about the number of persons living in the household). In this way a more true representation of the population was obtained, not depending only on the characteristics of the persons that were at home and picked up the telephone handset in the period 10:00-21:00 when calls were carried out (this could have caused a bias, i. e., favouring housewives' answers).

Once the results were obtained, a weighting procedure was applied in order to give the same representativity to all people: each particular answer was increased proportionally to the number of persons living in the household. This corrected the fact that single people living alone (in the draw carried out after picking up the telephone these people always "were chosen" for answering the questions) had more presence in the sample than the ones living accompanied. Answers of the persons dwelling in households of 2, 3, 4... members, were given a weight 2, 3, 4... times bigger in the total computing.

Questions referred not only to the use of the information technologies in the household, but also at work, at school, the university and/or at any other place (association, library, cybercafé, other people's home, etc.) --these last possibilities got a number of answers very low--.

2. Executive summary with the main results

44,1% of the Spanish households inhabited by one or more persons aged between 15 and 65 had a computer in past December 1998. The percentage decreases to 37,7% (approximately) if all the households are included.

Due to the chosen age group, out of the existing 11,8 millions of Spanish households at the time when the telephone calls were made, 1,7 millions households inhabited only by persons aged more than 65 and/or less than 15 were discarded. Assuming that in these households the number of computers is unnoticeable, it is not risky to say that in absolute terms in Spain there are at less 4,45 millions of households with one or more computers. The number of installed computers in households by 100 inhabitants (Spain, all the ages) is 11,3 (*).

(*) The total number of inhabitants in Spain, including all ages, is 39.371.100.

The number of inhabitants between 15 and 65 is 27.264.100

The ratio of computer users in the country is 36,8%. This figure is smaller than the one of households, because many members of the family do not use computer neither at home nor in any other place. As per the above ratio, we can say that at less 10.033.000 Spaniards use computers, i. e., more than 25% of the total population.

The detachment of the users is: 37,5% have computer only at home, 31,5% only at work or in their studies, 28,1% in both places (home and work/studies) and only 3% use a computer in some other place. These percentages adds up 100.

We could say the above also this way: 65,5% use computer at home, 59,5% at work/school/university and 3% in other places.

Among those that do not use a computer, 11,6% think they are going to use it at home, 5,9% at work/studies and 2,4% in both places before the next 2 years. I. e., 14% are thinking to have a computer available at home and 8,3% in their place of work/study before 2 years.

Among the persons that have a computer, 50,4% use informative cd-roms (excluding games), of which 81,8% at home and 26,1% at work or studies.

34,3% of the computer users have also internet access or to other online services. This figure means 12,6% (about 3.442.000 persons) of the age segment of the population considered more active (between 15 and 65 years old). 22,2% have access from their work/study place.

The main uses of the connection are for:

	From household	From work/study
- Information (topics of interest, newspapers, databases, etc.):	81,2%	68,0%
- Communication (e-mail, lists and discussion groups):	72,9%	54,0%
- Transactions (banking, shopping, software download):	56,5%	35,3%
- Entertainment:	23,6%	----
- Distance learning:	6,5%	4,5%
- Telework:	1,0%	3,0%

Electronic commerce is very incipient in Spain. Only 14% of the internet users declare having bought some product, but only 7,9% afforded data about how much they had spent in their shopping.

3. Complete report

3.1. Computers in homes

44,1% of the total of the Spanish households in which there are one or more persons between 15 and 65 years had a computer available in December of 1998. The percentage decreases to 37,7% (approximately) if all the households are included.

Due to the age group chosen, out of the total of 11,8 millions of Spanish households when the telephone calls were made, 1,7 millions of them inhabited only by persons aged 65 or more and/or by younger than 15 were discarded. If we suppose that in these households the number of computers is unnoticeable, it is not risky to say that in absolute terms in Spain there are at less 4,45 millions of households with one or more computers installed. The number of computers installed in households by 100 Spaniards (all the ages) would be 11,3 (*).

(*) The total number of Spanish inhabitants, including all ages, is 39.371.100. The number of inhabitants aged between 15 and 65 is 27.264.100

3.2. Computer users

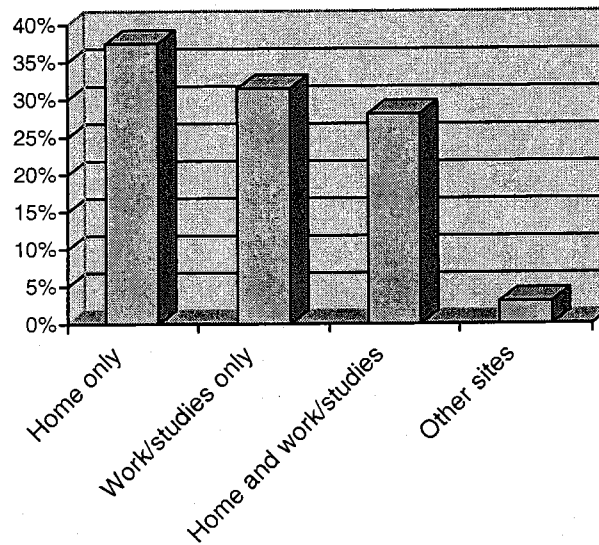
The rate of computer users is 36,8%. This figure is smaller than the one of households, because many members of the family do not use computers neither at home nor in any other place. According to the above percent, at less 10.033.000 Spanish people use a computer, i. e., more than 25% of the population.

3.2.1. Where computer is used

The detachment of the users is: 37,5% have a computer only at home, 31,5% only at work or in their studies site, 28,1% in both places (home and work/studies –school, university, etc.-) and only 3% use them in some other place. These percentages adds up 100.

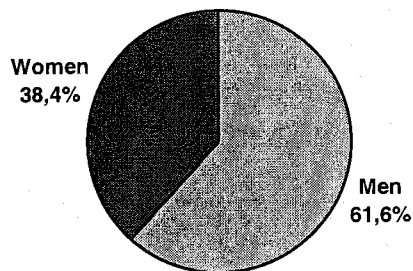
This could also be expressed in this way: 65,5% use a computer at home, 59,5% at work/studies and 3% use them in other places.

Computer use location



3.2.2. Computer users by gender

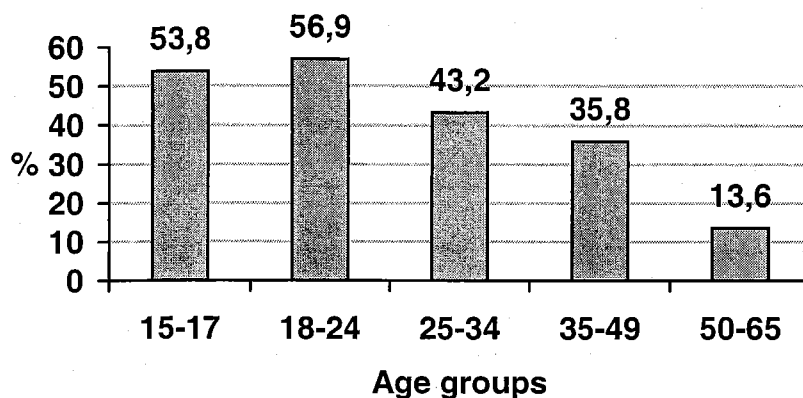
By gender, the Spanish share of computers use is:



3.2.3. Computer users by age groups

Taking the percentage of the users in each of the considered age groups (not over all the users):

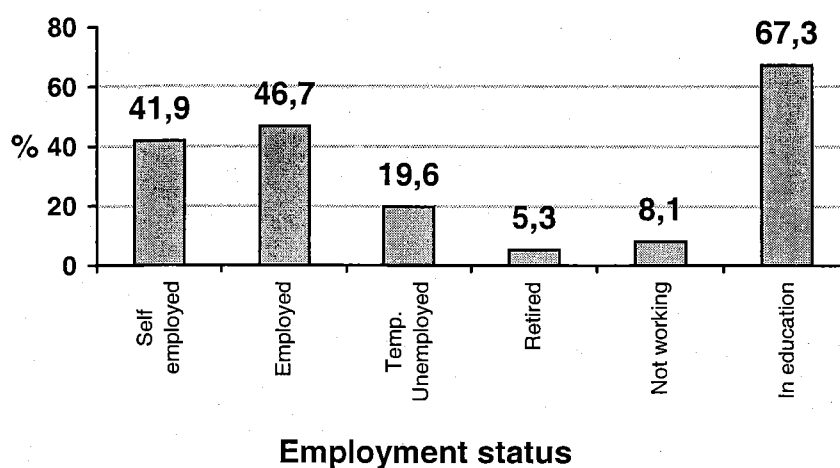
Density (%) of computer users in each age group



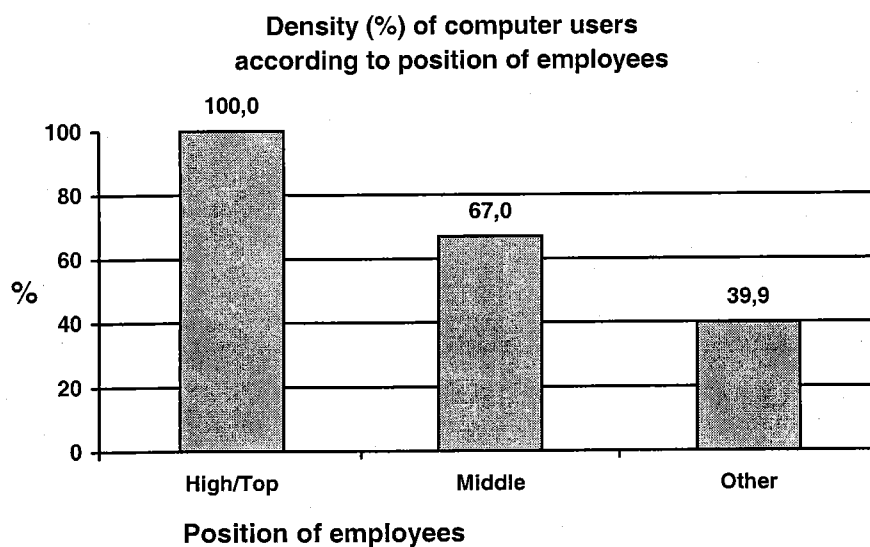
Among those not using computer, 11,6% think they are going to have one at home, 5,9% at work/studies and 2,4% in both places before the next 2 years. I. e., 14% think that they are going to have a computer at home and 8,3% in their place of work/study before 2 years.

3.2.4. Computer users by employment status or education

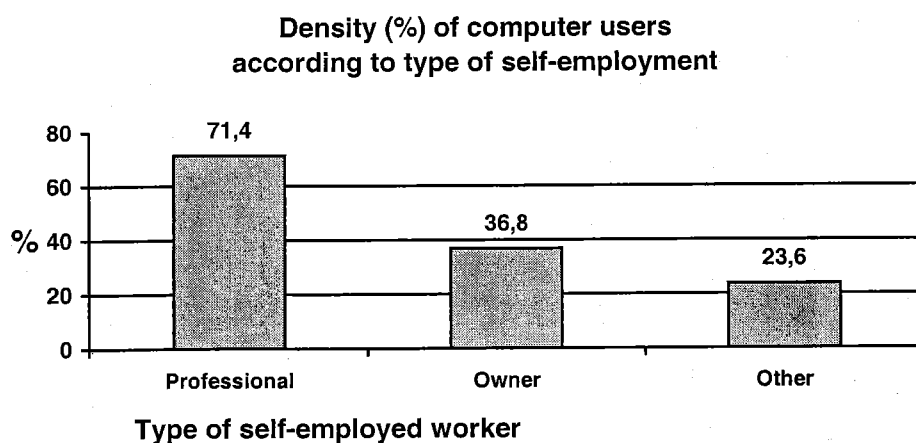
Density (%) of computer users in each employment or studies status



3.2.4.1. Position of the employees



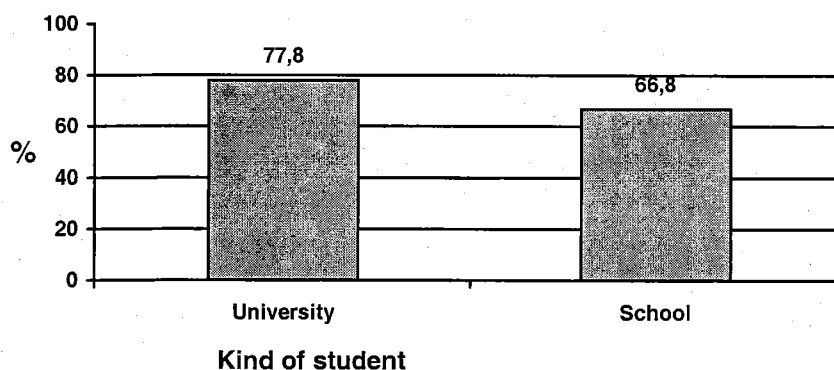
3.2.4.2. Self-employment kind of work



3.2.4.3. Still in education

In this drawing only the two categories in which representative data were obtained are shown:

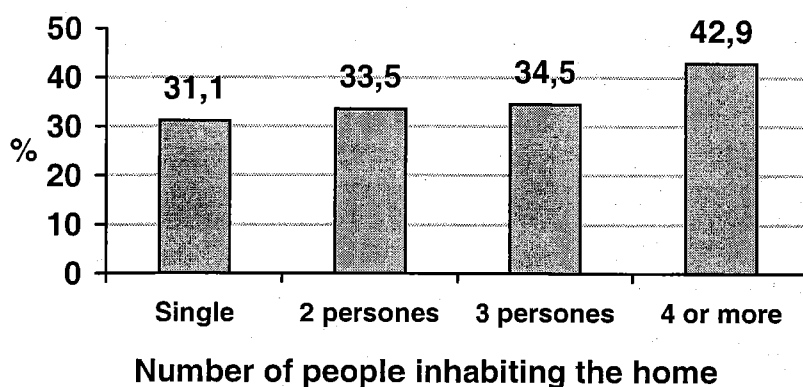
**Density (%) of computer users
according to type of student**



3.2.5. Computer users by household size

A small increase correlative to the number of persons that inhabit the household is perceived. This corresponds with the greater percentage found in former chapters of this report for students and young people.

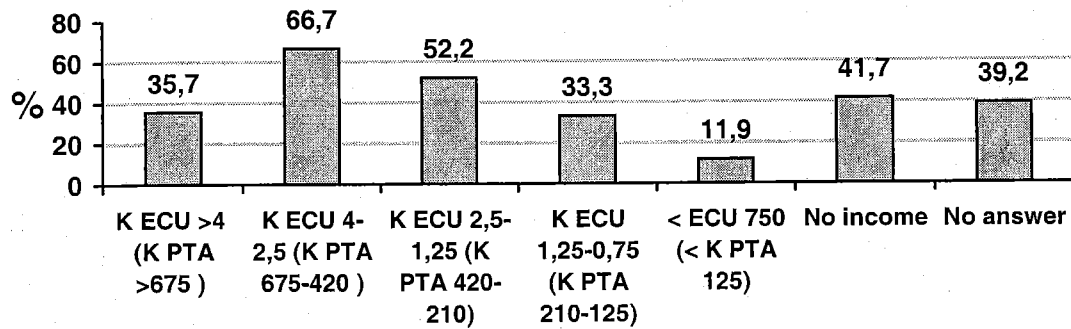
**Density (%) of computer users by
household size**



3.2.6. Computer users by household net income in ECU

See note to this respect for the answer "no income" in point 3.4.7.

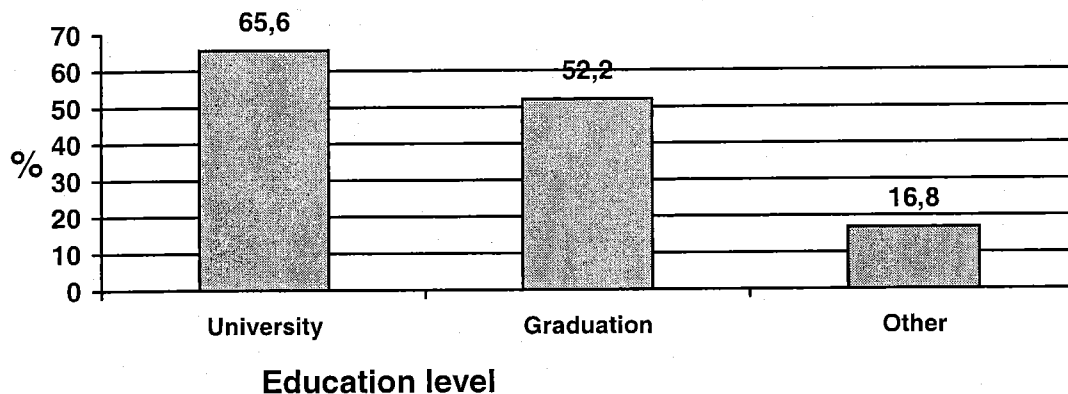
Density (%) of computer users by family income



Household monthly net income

3.2.7. Computer users by education level

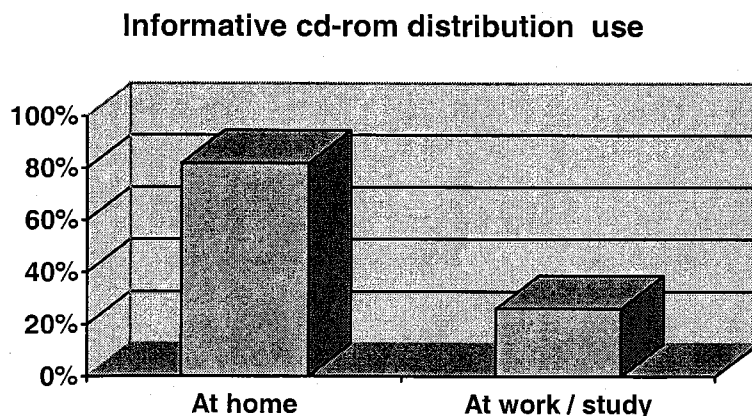
Density (%) of computer users according to education level



3.3. Usage of CD-ROMs

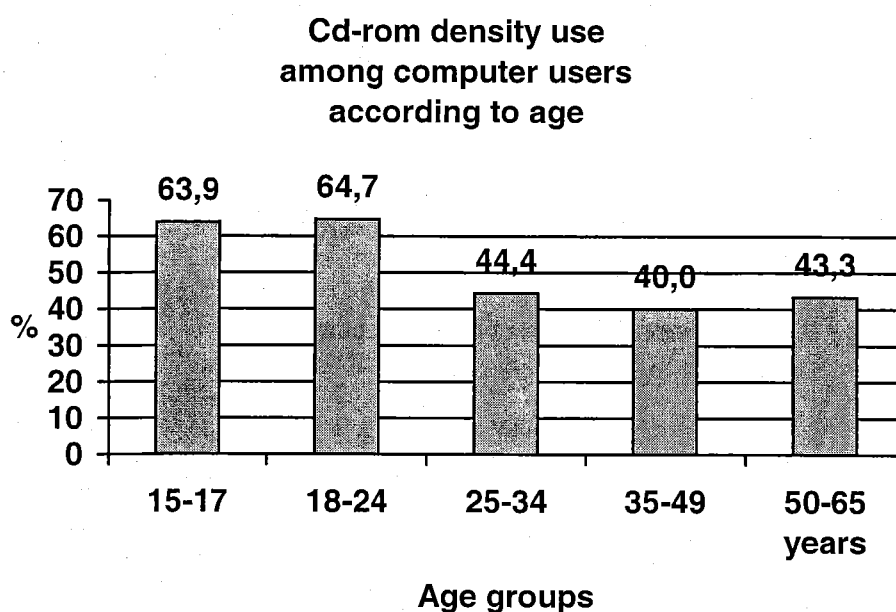
Among the persons that have a computer available, 50,4% use informative cd-roms (excluding games), of which 81,8% use them at home and 26,1% at work or study.

The ratio usage of cd-roms by gender follows a similar pattern to the computer users, although it seems that here there is some more leaning to men: 64% men and 36% women.



3.3.1. Usage of CD-ROMs by age groups

The usage distribution of informative cd-roms by age groups is the following:



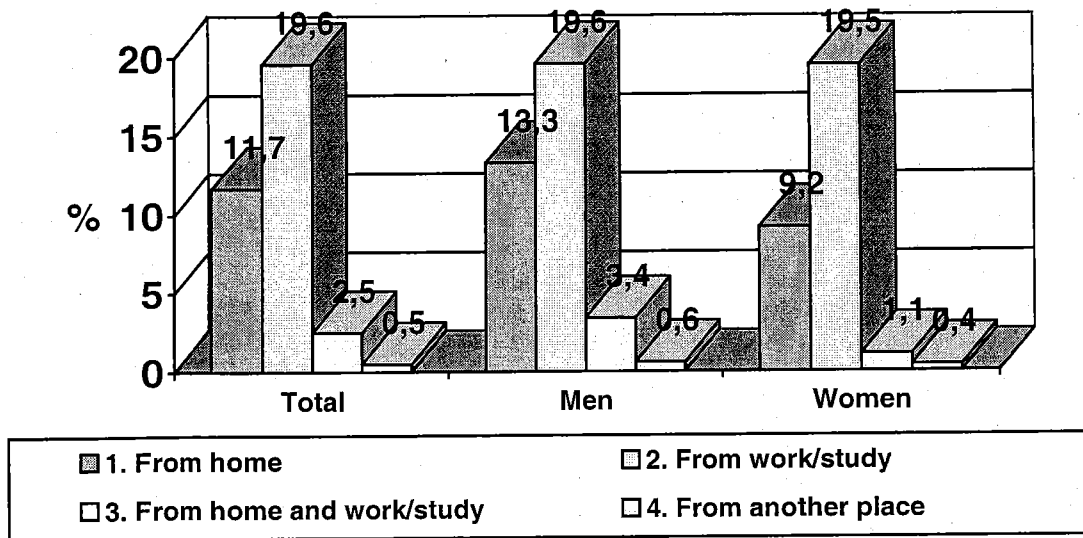
3.4. Internet access

34,3% of the computer users have also access to internet or to other online services. This represents 12,6% (about 3.442.000 persons) of the population segment considered more active (aged between 15 and 65).

3.4.1. Where the internet is accessed, by gender

19,6% of the total have access from work or studies, 11,7% from the household, 2,5% from both places and 0,5% from other sites.

Internet use among computer users, from location and according to gender

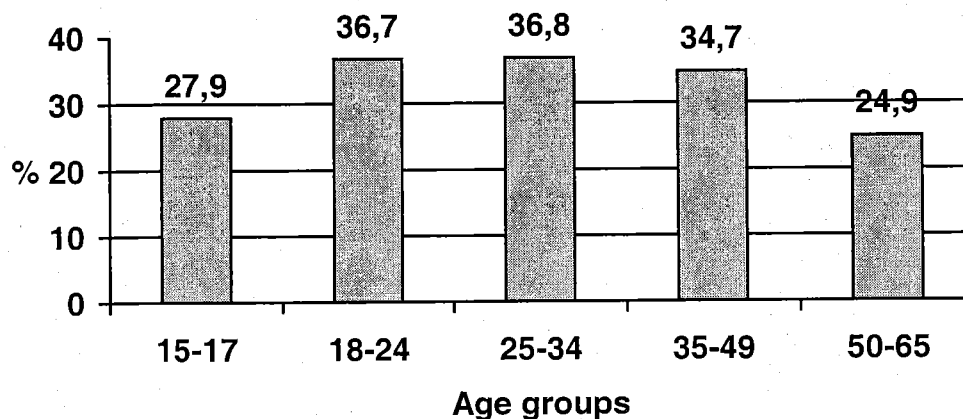


3.4.2. Internet access by age groups

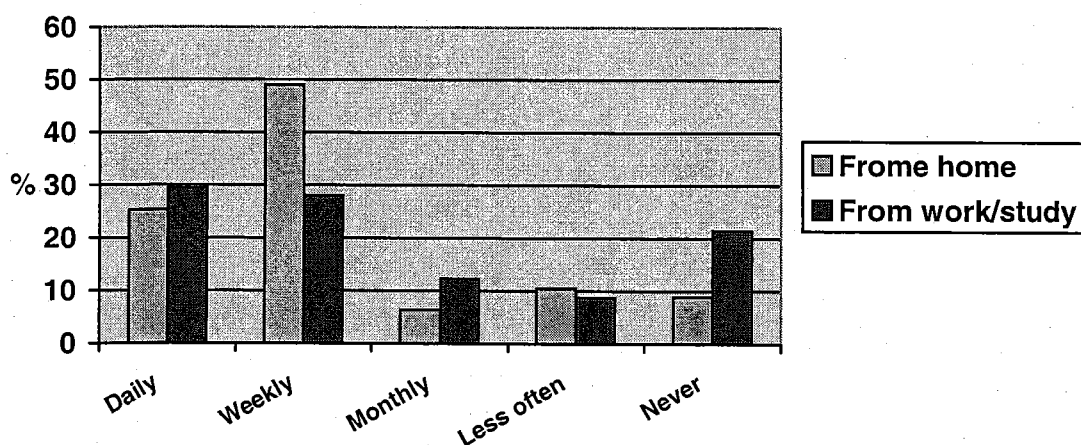
We see here that the main use of computers and cd-roms in school age do not corresponds with the maximum use of internet, due probably to the connection costs. Obviously, the internet access is considered to have less priority than the use of computers (and of cd-roms).

The main number of internauts can be located between the ages 18 and 34.

Density (%) of internet access among computer users in each age group



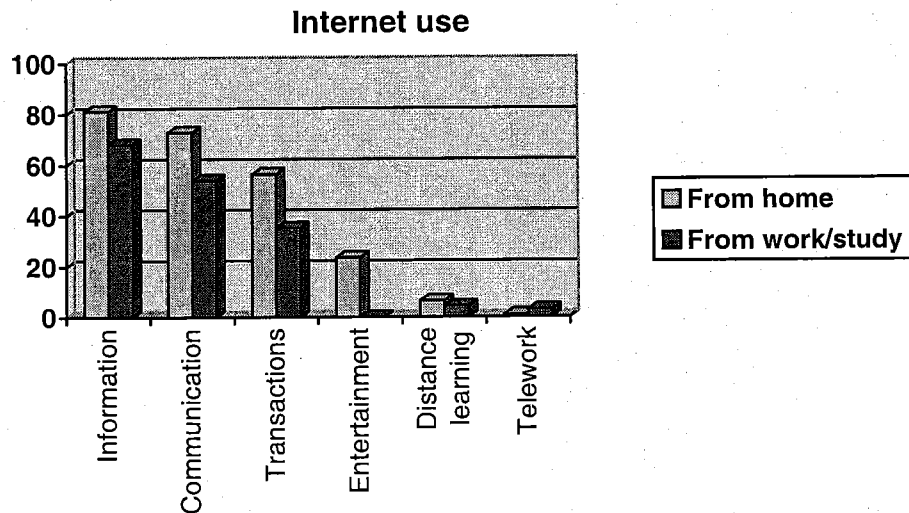
3.4.3. How frequently connected



3.4.4. Types of internet services used

The main uses of those having a connection are:

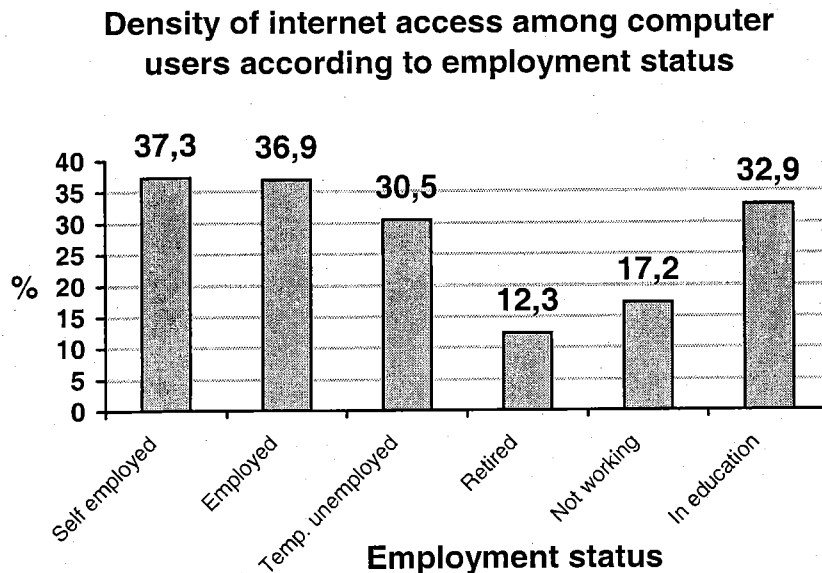
	From household	From work/study
- Information (interest topics, newspapers, databases, etc.):	81,2%	68,0%
- Communication (e-mail, discussion lists and news groups):	72,9%	54,0%
- Transactions (banking, shopping, software downloading):	56,5%	35,3%
- Entertainment	23,6%	----
- Distance learning:	6,5%	4,5%
- Telework:	1,0%	3,0%



The greater percentages of internet use from households shown in this drawing mean a greater variety of applications but not their intensity, that in some cases could be more important from the work or the study places.

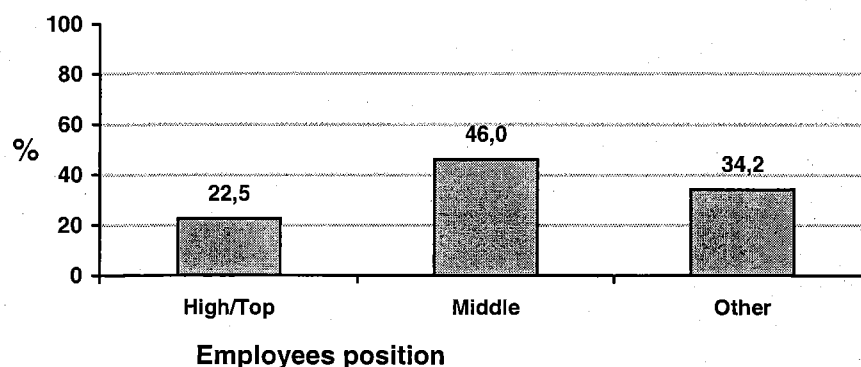
The electronic commerce is very incipient in Spain. 14% of the internet users stated having bought some product, but less than 8% afforded data about the volume of their expenditures.

3.4.5. Internet access by employment status or education



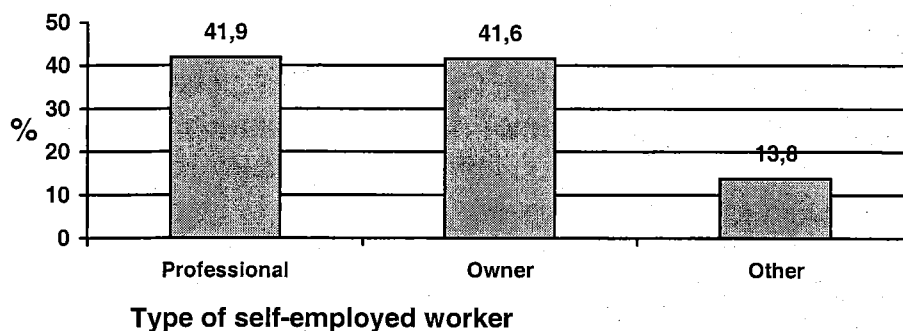
3.4.5.1. Position of the employees

Density of internet access among employees using computers according to their position



3.4.5.2. Self-employment kind of work

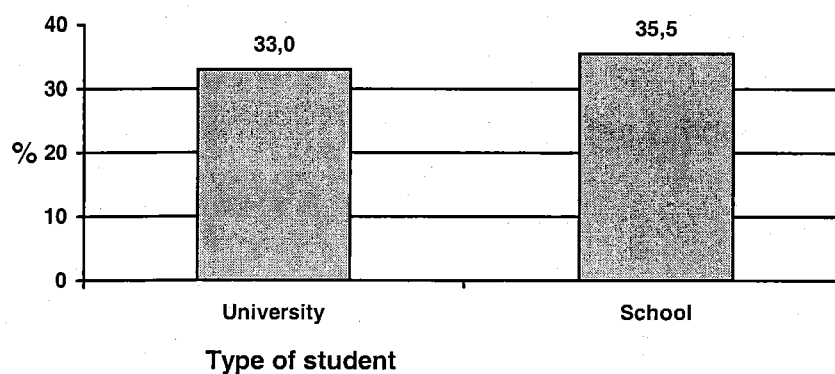
Density of internet access among computer users according to the type of self-employment



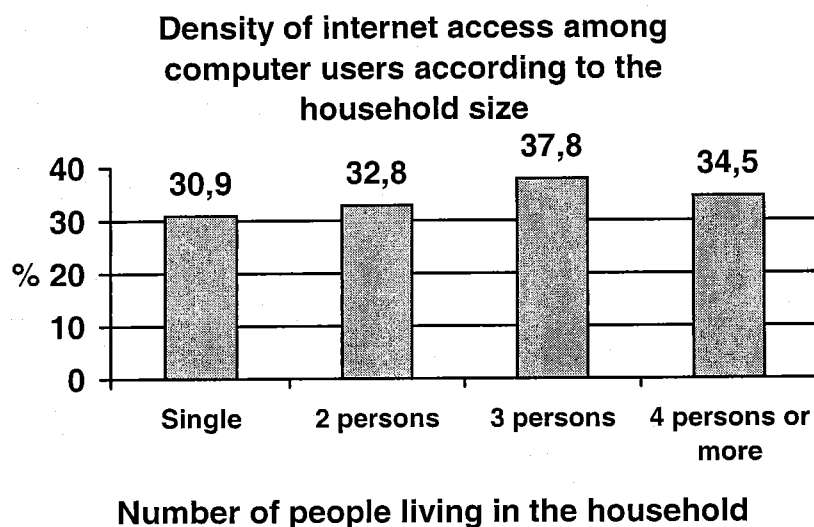
3.4.5.3. Still in education

In this drawing there are only the two categories in which representative data were got:

Density of internet access among computer users according to student type

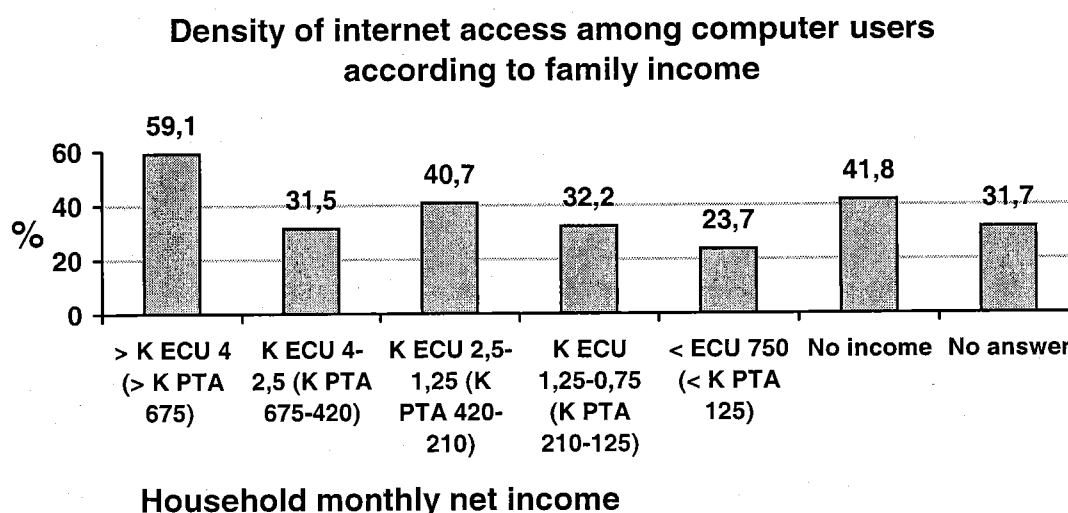


3.4.6. Internet access by household size

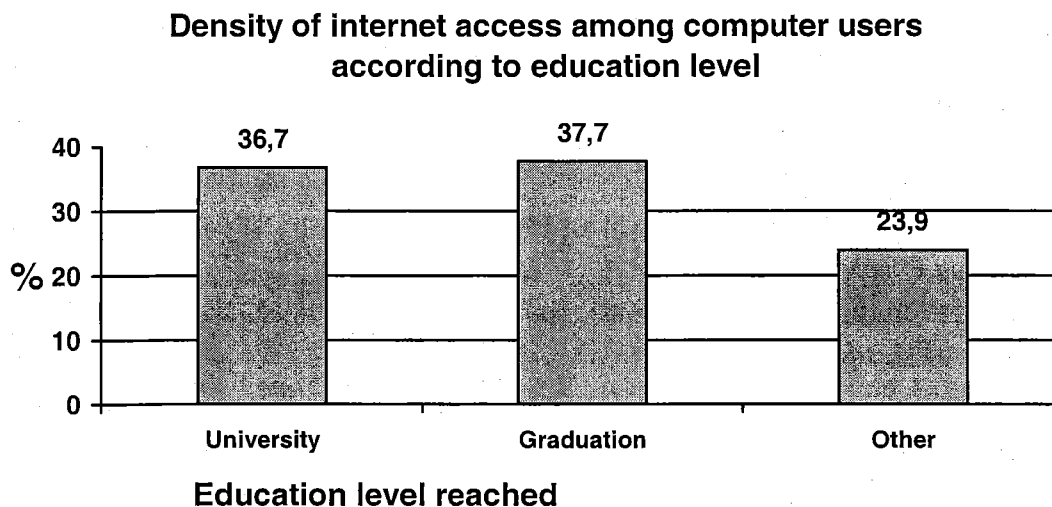


3.4.7. Internet access by household net income in ECU

The category "no income" is difficult to explain. The figure could correspond to unemployed people, and this would be corroborated by the results of the point 3.4.4., but the high figure is a little surprising. Also it could be due to some interview mistakes: the enquired person could be a student and could understand "income" as its own and not that of the family. Finally, this figure could be explained also because the interviewed person would not wish to give any figures.



3.4.8. Internet access by education level



4. Conclusions

The computing price reduction has caused computers to be usual equipment in many households, being this the place where larger number of people use them.

The more frequent users are the young men, most of them students (mainly at university level, but also quite a lot in secondary schools).

The monthly income of the family seems to be a crucial factor, but two extreme exceptions are produced:

- The higher income group use less the computer.
- The group "no income" (unemployed, jobless...) is an important user.

Cd-roms are used mainly by young people in the households.

The internet use –that in this interviews are based in the universe figure of computer users- have some characteristics a bit different: the proportion of women augments and nearly equals to the men (at work).

Most people connect weekly, but there is a sound group using the network daily.

Also it is relatively lower the number of internet connections among the youngsters. Possibly this group have less resources to connect, say because their schools are not equipped, say because in households this option is thought to have less priority.

The major proportion of internet access can be found among people aged 18-34, both self-employed and employed.

The cost of the connection seems to have some influence in all the interviews and it is clearly observed more usage in the group of higher household income.

We believe that in future surveys like this, interviews about computer and internet users should be extended to ages older than 65.

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- Statistical data processing and tabulation and ofimatic advice: **Julià Urrutia**, *ATE, Idescat*.
- General supervisor: **Josep Casco**, Subdirector, *ATE, Idescat*.

The authors want to thank the cooperation given and the valuable assessment offered by **Josep M^a Bas** and **Cèlia Gomà**, *Dept. Estadístiques Econòmiques, Idescat*, and of **Vicenç Meléndez**, *ATE, Idescat*.

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Annex

Tables DEMAND SIDE
(CATI interviews)

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Tab. 1A:
PC-Usage in Private Households at home /at work /both/elsewhere
in ** Spain ** 1999 in %

Absolut

		Employment Status												
Total		self employed	employed	temp.un- employed	retired	not working	in edu- cation	other	no answer					
Total Universe (weighted)		1622	198	568	158	95	322	278	2					
New Universe PC owners/users		597	83	265	31	5	26	187	-					
PC at home		224	30	58	21	5	19	90	-					
PC at work		188	24	108	2	1	4	48	-					
PC at home and at work		167	28	92	4	-	1	43	-					
PC elsewhere		18	1	6	4	-	1	5	-					
no answer		-	-	-	-	-	-	-	-					
SUM		597	83	265	31	5	26	187	-					
New Universe Non PC owners/ users		1025	116	303	127	90	296	91	2					
within next 2 years PC at home		119	16	32	17	1	33	19	1					
within next 2 years PC at work		61	7	25	8	-	3	17	-					
within next 2 years PC at home and at work		24	3	8	2	-	1	9	-					
within next 2 years PC elsewhere		7	-	2	-	-	1	4	-					
no/no answer		814	89	236	100	89	258	42	1					
SUM		1025	116	303	127	90	296	91	2					

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Tab. 1:
PC-Usage in Private Households at home /at work /both/elsewhere
in ** Spain ** 1999 in %

[illegible]

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Tab.1A:

PC-Usage in Private Households at home /at work /both/elsewhere

in ** Spain ** 1999 in %

Absolut

Education Level				Position of Employees					
Total	uni- versity	gradu- ation	other	no answer	Total Base	High/ Top	Middle	other	no answer
Total Universe (weighted)	1622	262	556	804	568	16	112	439	1
New Universe PC owners/users	597	172	290	135	265	16	75	175	-
PC at home	224	57	112	54	58	4	13	42	-
PC at work	188	47	95	45	108	3	32	73	-
PC at home and at work	167	67	75	25	92	8	29	55	-
PC elsewhere	18	1	7	10	6	-	2	5	-
no answer	-	-	-	-	-	-	-	-	-
SUM	597	172	290	135	265	16	75	175	-
New Universe Non PC owners/ users	1025	90	266	669	303	-	37	265	1
within next 2 years PC at home	119	20	42	57	32	-	6	26	-
within next 2 years PC at work	61	8	32	22	25	-	4	21	-
within next 2 years PC at home and at work	24	1	12	11	8	-	-	8	-
within next 2 years PC elsewhere	7	-	3	4	2	-	-	2	-
no/no answer	814	61	178	575	236	-	27	208	1
SUM	1025	90	266	669	303	-	37	265	1

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Tab.3:

PC-Usage of Electronic Services (ES) in Private Households at home
in ** Spain ** 1999 in %

-----Education Level-----Position of Employees

	Total	uni- versity	gradu- ation	other	no answer	Total Base	High/ Top	Middle	other	no answer
Total Universe (weighted)	85	28	44	13	-	30	2	10	18	-
New Universe Total Frequency of ES Usage	85	28	44	13	-	30	2	10	18	-
daily	25.3	25.5	23.5	31.0	-	16.2	-	8.7	22.5	-
weekly	49.0	48.8	56.9	21.8	-	59.8	53.8	66.4	56.9	-
monthly	6.4	6.8	4.9	10.4	-	6.3	46.2	7.7	-	-
less often	10.5	14.4	8.0	10.5	-	10.8	-	-	18.3	-
never	8.9	4.5	6.7	26.3	-	7.0	-	17.2	2.3	-
no answer	-	-	-	-	-	-	-	-	-	-
SUM	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-

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Tab.4:

PC-Usage of Electronic Services (ES) in Private Households at work
in ** Spain ** 1999 in %

----- Household Size -----									
	Total	Single	2 Pers.	3 Pers.	4 pers.	no answer			
Total Universe (weighted)	133	10	42	27	55	-			
New Universe Total Frequency of ES Usage	133	10	42	27	55	-			
daily	29.4	42.2	57.3	19.2	10.7	-			
weekly	28.0	16.0	13.8	19.9	45.1	-			
monthly	12.3	8.6	2.1	21.8	16.0	-			
less often	8.8	5.7	5.2	17.8	7.6	-			
never	21.5	27.5	21.6	21.2	20.6	-			
no answer	-	-	-	-	-	-			
SUM	100.0	100.0	100.0	100.0	100.0	-			

-----Self-Employment kind of work-----											-----Still in education-----				
	Total	Total Base	Profess- ional	Owner	other	no answer	Total Base	school	un- iversity	other	no answer				
Total Universe (weighted)	133	15	5	10	-	-	41	3	38	-	-				
New Universe Total Frequency of ES Usage	133	15	5	10	-	-	41	3	38	-	-				
daily	29.4	51.2	21.2	66.9	-	-	-	-	-	-	-				
weekly	28.0	19.7	36.6	10.8	-	-	61.1	100.0	58.4	-	-				
monthly	12.3	10.9	-	16.7	-	-	16.6	-	17.7	-	-				
less often	8.8	7.4	21.5	-	-	-	9.9	-	10.6	-	-				
never	21.5	10.7	20.6	5.5	-	-	12.4	-	13.3	-	-				
no answer	-	-	-	-	-	-	-	-	-	-	-				
SUM	100.0	100.0	100.0	100.0	-	-	100.0	100.0	100.0	-	-				

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[illegible]

[illegible]

(q.6.3-6.6)	68	51	17	6	13	20	21	9	-
Subjects of interest	86.2	86.0	86.9	100.0	100.0	77.5	82.9	84.4	-
Docum., newspapers, letters	52.1	50.8	55.9	39.6	52.1	47.1	61.8	48.2	-
Public institutions	39.1	32.5	58.6	-	30.8	45.7	50.9	33.1	-
Online Database and other EIS	39.8	41.5	34.9	32.9	44.2	27.3	42.6	59.2	-

New Universe Total Usage									
of Transaction services									
(q.6.7-6.11)	46	37	9	4	11	13	15	3	-
Electronic banking	27.7	22.1	52.2	-	-	38.7	34.0	79.3	-
Real-time financial information	30.5	29.9	33.2	27.6	-	20.5	54.2	69.7	-
Electronic shopping	22.9	28.2	-	-	29.6	42.1	11.0	-	-
Software download	76.8	77.3	74.6	100.0	83.8	79.5	59.0	100.0	-
Booking tickets	-	-	-	-	-	-	-	-	-

New Universe Total Usage									
of Entertainment services									
(q.6.12)	20	12	8	4	8	7	-	1	-
Entertainment services	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	-

New Universe Total Usage									
of Education services									
(q.6.13)	6	3	2	1	-	-	4	1	-
Education services	100.0	100.0	100.0	100.0	-	-	100.0	100.0	-

New Universe Total Usage									
of other ES									
(q.6.14)	1	1	-	-	1	-	-	-	-
Electr. Library	100.0	100.0	-	-	100.0	-	-	-	-

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Tab. 7A:									
Types of Electronic Services (ES) used in Private Households at home									
in ** Spain ** 1999 in %									
Absolut									

Gender									

Age Groups									

Total		male	female	14-17	18-24	25-34	35-49	50+	no answer

Total Universe (weighted)	85	61	23	8	16	24	25	12	-
E-mail activities	56	43	14	3	10	17	14	12	-
Bulletin boards /new-groups	25	16	9	2	2	11	7	3	-
Subjects of interest	59	44	15	6	13	15	17	7	-
Docum., newspapers, letters	36	26	10	2	7	9	13	4	-

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	Single	2 Pers.	3 Pers.	4 pers.	answer
Total Universe (weighted)	85				
New Universe Total Usage	4	32	16	33	-
of Communication Services					
(q.6.1-6.2)	60	24	13	21	-
E-mail activities	93.6	100.0	83.6	100.0	-
Bulletin boards /new-groups	40.8	23.8	46.0	50.1	-

New Universe Total Usage					
of EIS					
(q.6.3-6.6)	68	3	29	12	25
Subjects of Interest	86.2	55.3	88.6	100.0	81.0
Docum., newspapers, letters	52.1	72.3	60.6	40.3	45.2
Public institutions	39.1	83.0	40.6	30.5	35.8
Online Database and other EIS	39.8	83.0	42.8	17.3	41.3

New Universe Total Usage					
of Transaction services					
(q.6.7-6.11)	46	3	19	9	16
Electronic banking	27.7	36.0	25.0	25.5	30.8
Real-time financial	30.5	39.3	40.2	25.5	20.1
information					
Electronic shopping	22.9	19.6	12.4	33.2	30.5
Software download	76.8	64.0	72.7	66.8	89.5
Booking tickets	-	-	-	-	-

New Universe Total Usage					
of Entertainment services					
(q.6.12)	20	-	2	3	15
Entertainment services	100.0	-	100.0	100.0	-

New Universe Total Usage					
of Education services					
(q.6.13)	6	2	3	1	-
Education services	100.0	100.0	100.0	100.0	-

New Universe Total Usage					
of other ES					
(q.6.14)	1	-	1	-	-
Electr. Library	100.0	-	100.0	-	-

40					
Tab. 7:					
Types of Electronic Services (ES) used in Private Households at home					
in ** Spain ** 1999 in %					

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[illegible]

	Total	Total Base	Professional	Owner	other	no answer	Total Base	school	university	other	no answer
Total Universe (weighted)	85	21	13	6	2	-	22	-	22	-	-
New Universe Total Usage of Communication Services (q.6.1-6.2)	60	16	12	3	2	-	14	-	14	-	-
E-mail activities	93.6	100.0	100.0	100.0	100.0	-	86.6	-	86.6	-	-
Bulletin boards /new-groups	40.8	21.3	20.9	36.4	-	-	28.8	-	28.8	-	-
New Universe Total Usage of EIS (q.6.3-6.6)	68	18	13	2	2	-	18	-	18	-	-
Subjects of interest	86.2	79.1	80.4	100.0	41.8	-	100.0	-	100.0	-	-
Docum., newspapers, letters	52.1	47.1	44.4	66.1	41.8	-	45.8	-	45.8	-	-
Public institutions	39.1	32.4	28.6	33.9	58.2	-	22.7	-	22.7	-	-
Online Database and other EIS	39.8	60.1	61.1	100.0	-	-	42.9	-	42.9	-	-
New Universe Total Usage of Transaction services (q.6.7-6.11)	46	9	6	2	1	-	13	-	13	-	-
Electronic banking	27.7	20.6	18.7	33.9	-	-	-	-	-	-	-
Real-time financial information	30.5	12.8	20.5	-	-	-	7.2	-	7.2	-	-
Electronic shopping	22.9	30.6	39.7	22.3	-	-	17.2	-	17.2	-	-
Software download	76.8	72.5	79.5	43.8	100.0	-	93.6	-	93.6	-	-
Booking tickets	-	-	-	-	-	-	-	-	-	-	-
New Universe Total Usage of Entertainment services (q.6.12)	20	1	1	-	-	-	10	-	10	-	-
Entertainment services	100.0	100.0	100.0	-	-	-	100.0	-	100.0	-	-

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(q.6.3-6.6)	85	55	30	4	34	22	23	1	-
Subjects of interest	82.1	79.2	87.5	100.0	89.2	78.5	71.0	100.0	-
Docum., newspapers, letters	39.6	36.9	44.7	80.5	35.3	39.0	40.9	-	-
Public institutions	49.0	50.8	45.8	51.9	42.6	58.5	45.8	100.0	-
Online Database and other EIS	74.4	74.0	75.1	100.0	65.6	78.9	76.5	100.0	-

New Universe Total Usage									
of Transaction	46	32	14	1	18	13	13	1	-
(q.6.7-6.11)									
Electronic banking	24.1	23.5	25.7	-	12.4	24.0	46.4	-	-
Real-time financial	27.5	30.5	20.7	-	26.4	28.8	33.6	-	-
information									
Electronic shopping	12.5	12.9	11.6	-	11.9	10.6	17.9	-	-
Software download	69.2	67.7	72.6	100.0	68.8	81.4	51.3	100.0	-
Booking tickets	-	-	-	-	-	-	-	-	-

New Universe Total Usage									
of Entertainment services									
(q.6.12)	-	-	-	-	-	-	-	-	-
Entertainment services	-	-	-	-	-	-	-	-	-

New Universe Total Usage									
of Education services									
(q.6.13)	6	5	1	1	5	-	-	-	-
Education services	100.0	100.0	100.0	100.0	100.0	-	-	-	-

New Universe Total Usage									
of other ES									
(q.6.14)	5	2	4	-	1	2	2	-	-
Electr. Library	100.0	100.0	100.0	-	100.0	100.0	100.0	-	-

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Tab.8A:									
Types of Electronic Services (ES) used in Private Households at work									
in ** Spain ** 1999 in %									
Absolut									

Gender-----									

Age Groups									

Total		male	female	14-17	18-24	25-34	35-49	50+	no answer

Total Universe (weighted)	133	86	47	7	44	39	38	5	-
E-mail activities	64	41	23	3	21	20	18	3	-
Bulletin boards /new-groups	19	11	8	-	10	5	5	-	-
Subjects of interest	70	44	26	4	30	18	17	1	-
Docum., newspapers, letters	34	20	13	4	12	9	10	-	-

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		Single	2 Pers.	3 Pers.	4 pers.	answer	
Total Universe (weighted)	133	10	42	27	55	-	
New Universe Total Usage							
of Communication Services							
(q.6.1-6.2)	68	4	26	16	23	-	
E-mail activities	93.2	100.0	95.9	94.5	87.9	-	
Bulletin boards /new-groups	28.3	12.6	20.1	35.1	35.8	-	

New Universe Total Usage							
of EIS							
(q.6.3-6.6)	85	4	27	18	36	-	
Subjects of interest	82.1	65.0	83.0	82.1	83.5	-	
Docum., newspapers, letters	39.6	43.7	48.1	28.9	38.2	-	
Public institutions	49.0	68.0	49.9	53.9	43.7	-	
Online Database and other EIS	74.4	67.9	85.6	68.3	69.9	-	

New Universe Total Usage							
of Transaction							
(q.6.7-6.11)	46	3	18	8	17	-	
Electronic banking	24.1	33.5	35.1	28.6	8.5	-	
Real-time financial	27.5	15.7	22.7	44.6	26.4	-	
Information							
Electronic shopping	12.5	20.9	5.8	33.9	7.9	-	
Software download	69.2	63.4	72.9	54.1	73.5	-	
Booking tickets	-	-	-	-	-	-	

New Universe Total Usage							
of Entertainment services							
(q.6.12)	-	-	-	-	-	-	
Entertainment services	-	-	-	-	-	-	

New Universe Total Usage							
of Education services							
(q.6.13)	6	-	-	2	4	-	
Education services							

New Universe Total Usage	100.0	-	-	100.0	100.0	-	
of other ES							
(q.6.14)	5	-	2	-	3	-	
Electr. Library	100.0	-	100.0	-	100.0	-	

46							

Tab.8:							
Types of Electronic Services (ES) used in Private Households at work							
in ** Spain ** 1999 in %							

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[illegible]

[illegible]

	Total	male	female	14-17	18-24	25-34	35-49	50+	no answer
Total Universe (weighted)	74	56	19	6	14	21	21	12	-
0 ECU	-	-	-	-	-	-	-	-	-
< 25 ECU	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-
26- 50 ECU	-	-	-	-	-	-	-	-	-
51- 100 ECU	-	-	-	-	-	-	-	-	-
101- 150 ECU	-	-	-	-	-	-	-	-	-
151- 200 ECU	-	-	-	-	-	-	-	-	-
201- 250 ECU	-	-	-	-	-	-	-	-	-
> 250 ECU	-	-	-	-	-	-	-	-	-
no answer	-	-	-	-	-	-	-	-	-
SUM	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-
50									
Tab.9:									
Monthly Expenditures for ES at home (including subscriptions to network services, excluding purchases of goods, software, hardware) in ECU (all respondents of qu.9)									
In ** Spain ** 1999 in %									
Employment Status									
Total		self		temp.un-		not	in edu-		no

[illegible]

Household net Income in Ecu														
Total	4000+	2500-3999	1250-2499	750-1249	<750	no income	no answer							
Total Universe (weighted)	74	1	5	21	23	1	23							
0 ECU	-	-	-	-	-	-	-							
< 25 ECU	100.0	100.0	100.0	100.0	100.0	100.0	100.0							
26- 50 ECU	-	-	-	-	-	-	-							
51- 100 ECU	-	-	-	-	-	-	-							
101- 150 ECU	-	-	-	-	-	-	-							
151- 200 ECU	-	-	-	-	-	-	-							
201- 250 ECU	-	-	-	-	-	-	-							
> 250 ECU	-	-	-	-	-	-	-							
no answer	-	-	-	-	-	-	-							
SUM	100.0	100.0	100.0	100.0	100.0	100.0	100.0							

53														

Tab. 9:														
Monthly Expenditures for ES at home (including subscriptions to network services, excluding purchases of goods, software, hardware) in ECU (all respondents of qu.9)														
in ** Spain ** 1999 in %														

Education Level -----														
Total	university	graduation	other	no answer	Total Base	High/Top	Middle	other	no answer					
Total Universe (weighted)	74	26	40	8	27	2	8	16	-					
0 ECU	-	-	-	-	-	-	-	-	-					
< 25 ECU	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0					
26- 50 ECU	-	-	-	-	-	-	-	-	-					
51- 100 ECU	-	-	-	-	-	-	-	-	-					
101- 150 ECU	-	-	-	-	-	-	-	-	-					
151- 200 ECU	-	-	-	-	-	-	-	-	-					
201- 250 ECU	-	-	-	-	-	-	-	-	-					
> 250 ECU	-	-	-	-	-	-	-	-	-					
no answer	-	-	-	-	-	-	-	-	-					
SUM	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0					

54														

Tab. 9:														

Monthly Expenditures for ES at home (including subscriptions to network services, excluding purchases of goods, software, hardware) in ECU (all respondents of qu.9) in ** Spain ** 1999 in %											
Self-Employment kind of work						Still in education					
	Total	Total Base	Profess- ional	Owner	other	no answer	Total Base	school	uni- versity	other	no answer
Total Universe (weighted)	74	20	13	4	2	-	19	-	19	-	-
0 ECU	-	-	-	-	-	-	-	-	-	-	-
< 25 ECU	100.0	100.0	100.0	100.0	100.0	-	100.0	-	100.0	-	-
26- 50 ECU	-	-	-	-	-	-	-	-	-	-	-
51- 100 ECU	-	-	-	-	-	-	-	-	-	-	-
101- 150 ECU	-	-	-	-	-	-	-	-	-	-	-
151- 200 ECU	-	-	-	-	-	-	-	-	-	-	-
201- 250 ECU	-	-	-	-	-	-	-	-	-	-	-
> 250 ECU	-	-	-	-	-	-	-	-	-	-	-
no answer	-	-	-	-	-	-	-	-	-	-	-
SUM	100.0	100.0	100.0	100.0	100.0	-	100.0	-	100.0	-	-

Cuestionario sobre el uso de servicios electrónicos

Un estudio para la *Comisión Europea*

Período de referencia: 1998

Edades: más de 14 años (15 o más) hasta 65 años

Preguntar al miembro de la familia que le corresponda por sorteo:

I. Equipo

0. ¿Tienen algún ordenador en su casa?

1. ¿Usa Vd. algún ordenador personal o PC?

- | | | |
|---|-----|-----------------------|
| · en casa | --- | pasar a la pregunta 3 |
| · en el trabajo / en la escuela / en la universidad | --- | pasar a la pregunta 3 |
| · en otro lugar | --- | pasar a la pregunta 3 |
| · no | --- | pasar a la pregunta 2 |

Modelo:

1.1. Windows 3.1 o modelo anterior

en casa

en el trabajo...

[]

[]

1.2. Windows 95 ó 98

[]

[]

Época de adquisición:

1.3. ¿Comprado o instalado en los
últimos 12 meses?

en casa

en el trabajo...

[]

[]

(incluye Navidad / Reyes del año pasado)

2. Si no, ¿cree que usará un PC en los próximos 2 años?

- | | | | |
|------|---------|---------------------------------------|---------------------------|
| | en casa | en el trabajo / escuela / universidad | |
| · sí | [] | [] | ---> pasar a estadísticas |
| · no | [] | [] | ---> pasar a estadísticas |

3. ¿Usa información electrónica en cd-rom?

- | | | |
|------|---------|---------------------|
| | en casa | en el trabajo, etc. |
| · si | [] | [] |
| · no | [] | [] |

4. ¿Tiene su PC conexión a una red como InfoVía (vía módem, rdsi, conexión permanente externa)? --siempre nos referimos a transmisión de datos--

- | | | | |
|------|---------|---------------------|-------------------------|
| | en casa | en el trabajo, etc. | |
| · si | [] | [] | ---> pasar a pregunta 5 |

· no [] [] ---> pasar a estadísticas

II. Datos sobre uso de los servicios. General

**5. ¿Con qué frecuencia se conecta Vd. online?
(usando la conexión citada en la pregunta 4)**

desde casa desde el trabajo

· diariamente	[]	[]
· cada semana	[]	[]
· una vez al mes	[]	[]
· con menos frecuencia	[]	[]
· nunca	[]	[]

---> pasar a estadísticas

III. Tipos de servicios utilizados con el PC

Estamos interesados en saber si con el PC utiliza alguno de estos servicios:

desde casa desde el trabajo

6.1 ¿Envía o recibe correo electrónico (e-mail) a / desde fuera de su empresa o de su domicilio?	[]	[]
6.2 ¿Utiliza listas de discusión, boletines o grupos de <i>news</i>?	[]	[]
6.3 ¿Se informa sobre temas de interés? (desde el PC)	[]	[]
6.4 ¿Lee documentos, diarios o noticiarios en formato electrónico?	[]	[]
6.5 ¿Se pone en contacto con instituciones públicas? (desde el PC)	[]	[]
6.6 ¿Tiene acceso a bases de datos u otros servicios de información electrónica?	[]	[]
6.7 ¿Utiliza servicios de banca electrónica desde el PC? (el "banco en casa", consulta el saldo, etc.)	[]	[]
6.8 ¿Consulta información financiera en tiempo real? (cotizaciones de bolsa, etc.)	[]	[]
6.9 ¿Realiza algún tipo de compra desde el PC? (billetes, entradas, súper, objetos, libros, discos...)	[]	[]

Si contesta afirmativamente a la pregunta anterior (desde casa):

6.9.1. ¿Cuánto dinero gasta cada mes Vd. y su familia en compras por vía electrónica?

Incluyendo la suscripción a los servicios de la red (proveedor de internet, etc.)

_____ PTA

6.10 ¿Descarga (baja) software? [] []

6.11 ¿Usa las conexiones online como juego o entretenimiento desde su casa? []

6.12 ¿Estudia o sigue cursos a distancia usando el PC? [] []

6.13 ¿Trabaja conectado desde casa (hace teletrabajo)? []
(aunque sólo sea a dedicación parcial)

6.14 ¿Utiliza algún otro tipo de servicio electrónico que no hayamos mencionado?
Per favor, especifíquelo:

En casa:

En el trabajo:

IV. Proveedor de internet

7. ¿Quién es su proveedor de internet y/o correo electrónico?

Arrakis []
Bitmailer []
Cinet []
Compuserve []
Hotmail []
ICTnet []
Intercom []
RedIRIS []
RedesTB []
Sarnet []
Servicom []
Teleline []
..... []

V. Estadísticas

1. Sexo

Hombre ☐
Mujer ☐

2. Edad

_____ años

3. ¿Cuántas personas viven en su hogar, incluyéndose Vd. mismo?

4. Trabajo. En este momento, Vd.:

- | | |
|---|-------------------------|
| <input type="checkbox"/> Trabaja por su cuenta | ---> pasar a pregunta 5 |
| <input type="checkbox"/> Es un empleado | ---> pasar a pregunta 6 |
| <input type="checkbox"/> Temporalmente no trabaja (enfermo, paro) | ---> pasar a pregunta 8 |
| <input type="checkbox"/> Está jubilado, retirado | ---> pasar a pregunta 8 |
| <input type="checkbox"/> No está empleado, ama de casa | ---> pasar a pregunta 8 |
| <input type="checkbox"/> Es un estudiante | ---> pasar a pregunta 7 |

5. (Trabaja por su cuenta) ¿Qué clase de trabajo realiza?

- ☐ Profesión liberal (médico, abogado, contable, arquitecto, etc.)
☐ Empresario, propietario de un negocio, comercio, artesano, etc.
☐ Otros que trabajan por su cuenta
- > pasar a pregunta 8

6. (Empleado) ¿Qué tipo de trabajo realiza?

- ☐ Directivo, alto cargo
☐ Mando intermedio (jefe de depto., de sucursal, etc.)
☐ Otros
- > pasar a pregunta 8

7. (Estudiante) ¿Qué nivel de estudios realiza?

- ☐ Escuela secundaria, BUP, COU, FP
☐ Universidad
☐ Otros

8. ¿Qué nivel de estudios tiene?

☐ Universitarios (diplomado o grado medio, licenciado o grado superior)

☐ COU o titulación FP

☐ Otros

9. Ingresos mensuales netos de su familia

1. ☐ más de 675.000 pesetas (>4.000 ECU)

2. ☐ 420.000 - 675.000 (2.500 - 3.999 ECU)

3. ☐ 210.000 - 420.000 (1.250 - 2.499 ECU)

4. ☐ 125.000 - 210.000 (750 - 1.249 ECU)

5. ☐ menos de 125.000 (<750 ECU)

6. ☐ cero, ningún ingreso

Muchas gracias por su cooperación.

AVALUACIÓ DE LA PENETRACIÓ DE LES TECNOLOGIES DE LA INFORMACIÓ I LA COMUNICACIÓ (TIC) A LA SOCIETAT CATALANA MITJANÇANT ENTREVISTES TELEFÒNIQUES

Període de referència: 1998

Edats: més de 14 anys (15 o més) fins a 65 anys

Cal preguntar al membre de la família que li toqui per sorteig:

I. Equipament

0. Tenen algun ordinador a la seva llar? sí ☐ no ☐

1. Usa vostè algun ordinador personal o PC?

- a casa ---> anar a la pregunta 3
- a la feina / a l'escola / a la universitat ---> anar a la pregunta 3
- a un altre lloc ---> anar a la pregunta 3
- no ---> anar a la pregunta 2

Model: a casa a la feina...

1.1. Windows 3.1 o model anterior ☐ ☐

1.2. Windows 95 ó 98 ☐ ☐

Època d'adquisició:

1.2. Comprat o instal·lat en els últims 12 mesos? ☐ ☐

(inclou Nadal / Reis de l'any passat)

2. Si no, pensa que usará un PC en els propers 2 anys?

- | | a casa | a la feina / escola / universitat... | |
|------|--------------------------|--------------------------------------|---------------------------|
| · si | <input type="checkbox"/> | <input type="checkbox"/> | ---> anar a estadístiques |
| · no | <input type="checkbox"/> | <input type="checkbox"/> | ---> anar a estadístiques |

3. Usa informació electrònica en cd-rom?

- | | a casa | a la feina, etc. |
|------|--------------------------|--------------------------|
| · si | <input type="checkbox"/> | <input type="checkbox"/> |
| · no | <input type="checkbox"/> | <input type="checkbox"/> |

4. Té el seu PC connexió a una xarxa com InfoVía (via mòdem, rdsi, connexió permanent externa)? --sempre ens referim a "transmissió de dades"--.

- | | a casa | a la feina | |
|------|--------------------------|--------------------------|---------------------------|
| · si | <input type="checkbox"/> | <input type="checkbox"/> | ---> anar a pregunta 5 |
| · no | <input type="checkbox"/> | <input type="checkbox"/> | ---> anar a estadístiques |

II. Dades sobre ús dels serveis. General

5. Amb quina freqüència es connecta vostè online (usant la connexió esmentada a la pregunta 4)

	des de casa	des de la feina	
· diariament	[]	[]	
· cada setmana	[]	[]	
· una vegada al mes	[]	[]	
· amb menys freqüència	[]	[]	
· mai	[]	[]	---> anar a estadístiques

III. Tipus de serveis utilitzats amb el PC

Estem interessats a saber si **amb el PC** fa servir algun d'aquests serveis:

	des de casa	des de la feina
6.1 Envia o reb correu electrònic (e-mail) a / des de fora de la seva empresa o del seu domicili?	[]	[]
6.2 Utilitza llistes de discussió, butlletins o grups de news?	[]	[]
6.3 S'informa vostè de temes d'interès? (des del PC)	[]	[]
6.4 Llegeix documents, diaris o noticiaris en forma electrònica?	[]	[]
6.5 Es posa en contacte amb institucions públiques? (des del PC)	[]	[]
6.6 Té accés a bases de dades o altres serveis d'informació electrònica?	[]	[]
6.7 Utilitza serveis de banca electrònica des del PC? (el "banco en casa", consultar el saldo, etc.)	[]	[]
6.8 Consulta informació financera en temps real? (cotitzacions de borsa, etc.)	[]	[]

6.9 Fa algún tipus de compra des del PC? ☐ ☐
(bitllets, entrades, súper, objectes, llibres, discos...)

6.9.1. ¿Quants diners es gasta cada mes vostè i la seva família en compres per via electrònica? Incloent la subscripció als serveis de la xarxa (proveïdor d'internet, etc.)

_____ PTA

6.10 Descarrega (còpia o baixa) software? ☐ ☐
(sempre en connexió online!)

6.11 Usa les connexions online per a jocs o per a entreteniment des de casa? ☐

6.12 Estudia o fa cursos a distància usant el PC? ☐ ☐

6.13 Treballa connectat des de casa (fa teletreball)? ☐
(encara que només sigui a dedicació parcial)

6. 14 Utilitza algún altre tipus de servei electrònic no mencionat fins ara?
Per favor, especifiqui'l:

A casa:

A la feina:

IV. Proveïdor d'internet

7. Qui és el seu proveïdor d'internet i/o de correu electrònic?

Arrakis	<input type="checkbox"/>
Bitmailer	<input type="checkbox"/>
Cinet	<input type="checkbox"/>
Compuserve	<input type="checkbox"/>
Hotmail	<input type="checkbox"/>
ICTnet	<input type="checkbox"/>
Intercom	<input type="checkbox"/>
RedIRIS	<input type="checkbox"/>
RedesTB	<input type="checkbox"/>
Sarenet	<input type="checkbox"/>
Servicom	<input type="checkbox"/>
Teleline	<input type="checkbox"/>
.....	<input type="checkbox"/>
No ho sap	<input type="checkbox"/>

V. Estadístiques

1. Sexe

Home ☐

Dona ☐

2. Edat

_____ anys

3. Quantes persones viuen a la seva llar, incloent-se vostè mateix?

4. Treball. En aquest moment, vostè:

☐ Treballa pel seu compte ---> anar a pregunta 5

☐ És empleat ---> anar a pregunta 6

☐ Temporalment no treballa (malalt, atur) ---> anar a pregunta 8

☐ Està jubilat, retirat ---> anar a pregunta 8

☐ No està empleat, mestressa de casa ---> anar a pregunta 8

☐ És estudiant ---> anar a pregunta 7

5. (Treballa pel seu compte) Quina classe de feina fa?

☐ Professi6 liberal (metge, advocat, comptable, arquitecte, etc.)

☐ Empresari, propietari d'un negoci, botiga, artesà, etc.

☐ Altres que treballen pel seu compte

---> anar a pregunta 8

6. (Empleat) Quin tipus de feina realitza?

☐ Directiu, alt càrrec

☐ Càrrec mig (cap de dept., de sucursal, etc.)

☐ Altres

---> anar a pregunta 8

7. (Estudiant) Quin nivell d'estudis realitza?

☐ Escola secundària, BUP, COU, FP

☐ Universitat

☐ Altres

8. Quin nivell d'estudis té?

- ☐ Universitaris (diplomat o grau mig, llicenciat o grau superior)
- ☐ COU o titulació FP
- ☐ Altres

9. Ingressos mensuals nets de la seva família?

- 1. ☐ més de 675.000 pessetes (>4.000 ECU)
- 2. ☐ 420.000 - 675.000 (2.500 - 3.999 ECU)
- 3. ☐ 210.000 - 420.000 (1.250 - 2.499 ECU)
- 4. ☐ 125.000 - 210.000 (750 - 1.249 ECU)
- 5. ☐ menys de 125.000 (<750 ECU)
- 6. ☐ zero, cap ingrès

Moltes gràcies per la seva cooperació.

Barcelona, desembre de 1998